APPENDIX A

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Frank LOEKER *et al.*
Serial No.: 10/565,770
Filed: September 20, 2006
Confirmation No.: 2986

Examiner: DOLLINGER, Michael M.
Art Unit: 1796

For: **POWDERY WATER-ABSORBING POLYMERS WITH FINE PARTICLES BOUND BY THERMOPLASTIC ADHESIVES**

FILED ELECTRONICALLY VIA EFS-WEB

Mail Stop AMENDMENT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

AFFIDAVIT UNDER 37 C.F.R. 1.132

I am Scott Smith, Director of Platform Research, Consumer Specialties, Evonik Stockhausen Inc. I hold a PhD in Organic Chemistry from The University of Cincinnati and specialized in the field of organic synthesis. I started working in the field of superabsorbent polymers in 1989 and continued working in this field to the present. I was employed by Nalco Chemical Company in Naperville, IL from December 1987 to December 1997. My position progressed from Senior Chemist to Group Leader, then Technical Director of Absorbent Chemicals. Since January 1998 I have been employed by Evonik Stockhausen Inc. in Greensboro, NC. My current position is Director of Platform Research, Consumer Specialties.

1. I am an inventor of numerous US patents and patent applications directed to superabsorbent polymers including US 5,314,420; US 5,399,591; US 5,451,613; US 5,462,972; US 6,906,131; US 2003/0207958; US 2004/0214499; US 2004/0214946; US 2004/0220350; US 2005/0020771; US 2005/0080182; 2005/0090586; US 2005/0096435; and corresponding foreign patents and patent applications.

2. I am an inventor of the current claims of the present invention, patent application 10/565,770. The current claims are directed to treated water-absorbing polymer particles consisting of a powdery water-absorbing polymer comprising 0.01 to about 20% of a fine particles having a particle size of less than about 200μm, about 0.001 to less than 1% of a thermoplastic adhesive; and water-absorbing polymer particle with a particle size of more than about 200μm wherein the fine particles are bound to the surface of the water-absorbing polymer particles by the thermoplastic adhesive and the treated water-absorbing polymer particles have either a flow value (FFC) of from about 1 to about 13, or a dust portion of up to about 6. The treated particles of the present invention involve using a small amount of thermoplastic adhesive to bind the fine particles to the surface of water-absorbing polymer particles during the making of the treated superabsorbent particles. This results in treated particles that can flow smoothly and are not dusty.
3. I have reviewed and analyzed the references cited in the January 22, 2009 Office Action including Mukaida et al (EP 0 612 533 A1 or US 5,672,419; Sun et al (US 6,124,391); Ball (WO 91/18042 A1); and the machine translation of Eisfeld et al (DE 100 26 861 A1) in view of the statements in the Office Action, alleging that the product of Mukaida et al , or Ball, or Eisfeld in view of Sun would make the current claims obvious. I disagree that the product of Mukaida et al , or Ball, or Eisfeld in view of Sun would make the product of the current claims or make the product of the current claims obvious.
4. Mukaida et al , and Ball, and Eisfeld are directed to SAP particles coated with a thermoplastic adhesive for bonding such SAP particles to fibers. None of these

references disclose or suggest binding fine particles to the thermoplastic adhesive coated SAP particles. Sun et al discloses a mixture of SAP particles and inorganic powder, but does not disclose binding the inorganic powder to the SAP particles with a thermoplastic adhesive. In fact, using the small amount of thermoplastic adhesive as set forth in the current claims would make the bonding of SAP particles to fibers inoperable.

5. The examples in the present application show that only a small amount of thermoplastic adhesive is used in binding the fine particles to the SAP particles. In particular, Table 2 shows the Quantity of Thermoplastic adhesive to be 0.3wt% and Table 3 shows the Quantity of Thermoplastic adhesive to be 0.5wt%. Using the amounts of thermoplastic adhesive suggested by Mukaida et al , or Ball, or Eisfeld in the present invention would result in the SAP particles sticking together into a large mass, which cannot be processed, and, hence, inoperable.

I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001; and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Dr. Scott Smith

4/20/09
Date

APPENDIX B

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AFFIDAVIT UNDER 37 C.F.R. 1.132

I am Stan McIntosh. I hold a BS in Textile Chemistry from North Carolina State University, and a PhD in Fiber and Polymer Science from North Carolina State University, with a specialization in the area of Polymer Chemistry. Upon completion of my PhD in 1990, I joined BASF located in Asheville, NC as a Research Chemist and started working in the field of polyamide extrusion and additives for polyamides. I was technical director for the Organic Pigments Corporation from 2000 to 2003, overseeing coloration products for printing, agricultural, and textile industries. Since May 19, 2003, I have been employed as a Research Scientist by Evonik Stockhausen Inc. located in Greensboro, NC.

I have conducted experiments of thermoplastic adhesive coated superabsorbent polymer particles using the thermoplastic adhesive polymer maleated polypropylene and found that, when superabsorbent polymer particles are coated with 1% maleated polypropylene, the particles are not processible to make the final product. In the heated reactor necessary to effect surface-crosslinking, the thermoplastic adhesive coated superabsorbent polymer particles stick together

in a mass, not particles, and cannot flow through the reactor as particles. As a result, the mass cannot be processed due to the particles sticking together. In addition, 1% polyester coated superabsorbent polymer particles cannot be processed through a paddle dryer due to the tack of the thermoplastic coating on the particles.

I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001; and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Dr. Stan McIntosh

April 22, 2009
Date